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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/578,871	05/11/2006	Hiroshi Sato	060347	3219
23850	7590	12/10/2007	EXAMINER	
KRATZ, QUINTOS & HANSON, LLP			UHLIR, CHRISTOPHER J	
1420 K Street, N.W.				
Suite 400			ART UNIT	PAPER NUMBER
WASHINGTON, DC 20005			2837	
			MAIL DATE	DELIVERY MODE
			12/10/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/578,871	SATO, HIROSHI	
	<b>Examiner</b>	<b>Art Unit</b>	
	Christopher Uhlir	2837	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 11 May 2006.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-8 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
  1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>05/11/2006</u> | 5) <input type="checkbox"/> Notice of Informal Patent Application |
|   | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 4, 7, and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Koseki et al. (US 5,804,751).

**Regarding claims 1 and 4,** Koseki et al. discloses a resonance generation device and method of an electronic musical instrument having a digital signal processing unit (column 3 lines 43-44), for artificially creating a resonance in a computer. A key depression state detecting process is disclosed to determine whether a key in a specific predetermined or stored relation with a played key is already depressed or played when a key playing operation is performed (column 6 lines 30-34).

Koseki et al. further discloses a process for detecting a specific relation between played keys and depressed keys, when the key in a specific predetermined relation is determined to be depressed (column 6 lines 30-34).

Also disclosed is a process for generating musical sound of a played key and other keys in a specific predetermined relation, and generating a musical sound based on said specific relation (column 2 lines 32-38). Said depressed key is the sound generation source (column 4 lines 60-64).

**In reference to claims 2 and 5,** Koseki et al. discloses a device and method as stated above, where monaural resonances are generated through the use of a single analog signal and output through speakers (column 3 lines 47-51). Koseki et al. further discloses a variation in volume or sound intensity according to the depressed key (column 4 lines 18-21).

**In reference to claims 3 and 6,** Koseki et al. discloses a device and method as stated above where the volume of the resonance based on the relation between the key played and the key depressed is controlled (column 5 lines 65-67).

**In reference to claims 7 and 8,** Koseki et al. discloses a computer program product including a computer readable recording medium (column 3 lines 62-65) for executing a resonance generation method of an electronic musical instrument having a digital signal processing unit (column 3 lines 43-44), for artificially creating a resonance in a computer. A program code within the central processing unit (column 4 lines 2-4) detects a key depression state determining whether a key in a specific predetermined or stored relation with a played key is already depressed or played when a key playing operation is performed (column 6 lines 30-34).

Koseki et al. further discloses said program code to detect a specific relation between played keys and depressed keys, when the key in a specific predetermined relation is determined to be depressed (column 6 lines 30-34).

Also disclosed is a means for generating musical sound of a played key and other keys in a specific predetermined relation, and generating a musical sound based on said specific relation (column 2 lines 32-38).

***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. A list of pertinent prior art is attached as form 892.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher Uhlir whose telephone number is 571-270-3091. The examiner can normally be reached on Monday-Thursday 8:00am-6:00pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lincoln Donovan can be reached on 571-272-1988. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
Christopher J Uhlir  
December 5, 2007

  
LINCOLN DONOVAN  
SUPERVISORY PATENT EXAMINER